PUBLIC MEETING

Ronald Reagan Building
International Trade Center
Horizon Ballroom
1300 13th Street, N.W.
Washington, D.C.

Friday, September 12, 2003 9:35 a.m.

COMMISSIONERS PRESENT:

GLENN M. HACKBARTH, Chair ROBERT D. REISCHAUER, Ph.D., Vice Chair SHEILA P. BURKE AUTRY O.V. "PETE" DeBUSK NANCY-ANN DePARLE DAVID F. DURENBERGER ALLEN FEEZOR RALPH W. MULLER ALAN R. NELSON, M.D. JOSEPH P. NEWHOUSE, Ph.D. CAROL RAPHAEL ALICE ROSENBLATT JOHN W. ROWE, M.D. DAVID A. SMITH MARY K. WAKEFIELD, Ph.D. NICHOLAS J. WOLTER, M.D.

AGENDA ITEM:	PAGE
Physician issues:	
Workplan for assessing payment adequacy and updating payments	
Kevin Hayes	2
Evaluation of AHRQ report on determinants of increases in Medicare	
expenditures for physician services	
Kevin Hayes	7
Melinda Beeuwkes Buntin, RAND	8

PROCEEDINGS

MR. HACKBARTH: Good morning. We have three items on the agenda this morning. The first two relate to physician services and then the final one to a report on site visits on health insurance markets for Medicare beneficiaries.

Kevin, you'll lead the way on the first item. As I recall, there are two parts here. One is a review of the work plan and the second is an introduction to a report, a Congressionally mandated report, that we have to comment on is that right?

DR. HAYES: That is correct, and I will begin with the work plan which concerns our work on developing a payment update recommendation for physician services for the March report.

I should point out, by the way, that for our second topic we have with us today Melinda Beeuwkes Buntin from RAND and I'll be introducing her in just a moment.

So proceeding with the work plan topic, and I'll just move through this quickly, as in the case of other sectors, we are about to answer two particular questions with respect to physician services. First, whether the current level of payments is adequate or appropriate, whether the level of payments is too high or too low.

The next question that we'll want to address, of course, is what do we expect in the way of changes in costs for the coming year.

With respect to the work we have in mind, they fall into two general categories. The first has to do with updating analyses that we included in this past March report, the March '03 report. And the analyses that we included there included entry and exit of providers, beneficiary access to care, changes in the volume of physician services. And then, in anticipation of what cost changes would be for the coming year, we addressed changes in input prices for physician services and the matter of productivity growth.

For the next report, we have a couple of additional analyses in mind to supplement what we did last time. In the area of physician willingness to provide services to Medicare beneficiaries we are hoping to have access to preliminary data

from the National Ambulatory Medical Care Survey that is conducted by the National Center for Health Statistics. This would be preliminary data for 2003. The survey includes a question about whether physicians accept Medicare beneficiaries or not, so we thought that would be a good thing to look at.

We also intend to look at data on physician incomes. There are data available from a variety of sources on this including the American Medical Association, the Medical Group Management Association, the American Medical Group Association and others. So we'll look at all of that and see what that tells us about this issue of payment adequacy.

And finally, we want to introduce some new data this year on beneficiary access to care. You have been after us to come up with timely data and we have plans to sponsor what we're calling for now a quick turnaround survey of Medicare beneficiaries. I don't have the time right now to go into all of the details on this but we're hopeful this will provide us with very timely information on access to care and other issues as necessary.

So that's all I have on the work plan. If I can answer any questions that you might have about it, and otherwise we'll proceed with the AHRQ report.

MR. HACKBARTH: Kevin, could you explain a little bit more about the work on physician incomes and how it might fit logically into our framework? Let me pose a hypothesis as a way to stimulate your thinking. What if we were to find that the willingness to serve Medicare beneficiaries was constant, or just for the sake of argument even increasing, yet physician total incomes were declining? What do we do with data about total -- I assume this is total physician income as opposed to just from Medicare?

DR. HAYES: That's correct. It would be total income from all sources. I guess we won't know what the data look like, of course, until we look at them and we're still in the mode of gathering the data from these different sources. But what I what would say, with respect to the particular scenario that you described, is that it's like everything else. It comes down to looking at a variety of different factors within the context of our update framework and to try and interpret as best we can what the data mean.

Beyond that, I can't say. It's just going to be a matter of going through this and seeing what we find.

MR. HACKBARTH: Although in other contexts, we have talked about the relevance of total margins versus Medicare margins, and I think where we've left that is our principal focus is on Medicare margins unless there is reason to believe that the total financial picture of a provider group is so severe that it will pose access problems for Medicare beneficiaries.

Hence the structure of my hypothetical where we have constant or improving access to Medicare beneficiaries, yet

declining total physician income.

DR. HAYES: Just thinking out loud here, but based on what we saw when we worked with contractors on differences between Medicare's payment rates for physician services and those in the private sector, it's quite possible that we will see the kind of thing that you're talking about. Because recall that we saw some, in general, some not exactly -- we saw a narrowing of the gap between Medicare's payment rates and the private sector. And that was largely because of the shift from more well-paying private plans to lower paying private plans.

And so that would be a case where there might be an explanation for why physician incomes are moving the way they are and it would not necessarily have anything to do with what's going on with respect to the Medicare program. And so looking at the other measures in our framework, like the physician willingness to accept Medicare beneficiaries, would provide the perspective that we need, the balanced perspective that we would need.

DR. REISCHAUER: I guess I feel even more strongly than Glenn does about this issue. I'm interested in physician's incomes just because I'm a nosy person. But I don't know what relevance it could really have to this, to the issues that are before us.

We should look at Medicare payments for services in comparison with the private sector and other government program payments and that makes sense. But if their incomes were going up tremendously you might find access going down because they could play more golf or something like that. The connections between the things we're interested in and income can go in many, many different channels and we'll be throwing out a lot of, in a sense, juicy information that could divert hard analysis of what the issues are that we should be focused on.

And as you know better than we, the fraction of total income for many physicians coming from Medicare is fairly small. For others it's fairly large.

I just am not sure this is worth devoting a lot of resources to.

DR. ROWE: Was this going to be done by specialty?

DR. HAYES: Yes, there are available by specialty and so we would look at those data, and also try to weight them, to come up with a kind of all-physician.

DR. HAYES: Recognizing my obvious bias here, but it would be interesting to see the income for geriatricians because by definition they're not a group where a small portion of their income comes from Medicare services. And it is a group that we think can be helpful in the main toward the well-being of the beneficiaries.

And so that's a group that we don't want to strangle particularly. So that's one group.

DR. REISCHAUER: What we care about is entry and exit -

DR. ROWE: And quality.

DR. REISCHAUER: -- and quality, and those are caused by a lot of other things besides income. And what you would want to be looking at is income relative to other incomes in society, not just some sort of absolute level.

DR. ROWE: I think we're interested in intake and output and quality. And I agree with you, Bob, that there are things other than income that are important, but that's not a reason not to look at income. But it's not really compared to other things in society because it seems to me that if a physician, someone who has decided they're going to be a physician and has gone to medical school, is now deciding what specialty to go in, they're not looking at their income potentially as a geriatrician versus if they become a lawyer or a It's versus becoming another kind of doctor.

And if this is a specialty that is particularly undercompensated, that doesn't seem to me to be in the best interest of the Medicare program. That's where I was going.

MR. FEEZOR: Kevin, in any of the relative income or relative payment levels between Medicare and the private sector, have there been any studies that go down below that to sort of the relative hassle factor, the relative promptness of payment, and the relative bad dept that evolves from the Medicare program versus that of commercial payers?

DR. HAYES: Yes. We sponsored a survey of physicians in 2002 where we asked about a number of those issues, particularly on the hassle factor question. I hesitate to report on the details because I'm not recalling them specifically, but we would be happy to update you on that at some future junction.

MR. FEEZOR: Actually, Kevin, I'm glad you couldn't because since the report was done in 2002, it was during my watch here and I didn't recall it either. So I'd love to see anything that we have on that.

Is this a contractor's report?

DR. MILLER: IS DR. RFTCC DR. REISCHAUER: So we aren't supposed to remember?

DR. MILLER: We'll get it to you.

Kevin, I missed how much of the income DR. NELSON: data we would be developing ourselves, or how much we would just be citing other sources that are on the public record anyway. And whether or not the data that we cite are based on salaries rather than other evidence of what physician income really is.

And finally, apart from the difficulty in interpreting it in the context of what it is we are interested in, in terms of access to care for reasons that others have cited, there are so many confounding points with respect to geographic variations, inter-specialty variations, it seems to me that it would be very difficult for us to draw conclusions. Unless we can really make a contribution by providing additional information that isn't

available otherwise, it seems to me that you may better spend your time someplace else.

DR. HAYES: To answer your questions, we don't have any intention of collecting our own data. On that physician survey that we conducted, we did ask for physician incomes and it was in some very general categories and it was just at a point in time. So our intention was to work with available sources, secondary sources, entirely for this project.

With respect to salaries versus net income, the distinction here I think that you're talking about has to do with the difference between salaried physicians and those who are self-employed. And we have information from different sources and some of them address one and some address the other.

But you're right, there is an important distinction there and we would need to be cognizant of that when we interpreted the data.

With respect to the confounders, you are right. All the data that we have are indicators of national level estimates. And so would, in a lot of cases, most cases, perhaps all cases, it would not be possible to drill down to any specific geographic area and look at regional differences, let's say, in income patterns. The best we can do is an all-physician estimate or estimates by specialty.

MR. SMITH: I share Bob's reluctance to independently take a look of physician income. It seems to me, Kevin, that we ought to get there if other data, access data, entry/exit data, suggest that there's something that we ought to explain.

But Jack used the phrase undercompensated. Compensation might explain exit or it might explain entry but there isn't some absolute notion of undercompensation. And I'd be reluctant to try to think about that unless we had some Medicare issue, most importantly an access issue, which we were looking to explain that might then be corrected through the payment system.

But independently collecting data on physician income in order to explain something or in order to explain nothing doesn't seem like a very good use of time and, for prurient reasons, Bob's nosy reasons, would be as likely to be diversionary as useful it seems to me.

DR. ROWE: Let me try a line of reasoning and see if it's coherent, and it may not be. Or it may be coherent but not important, not reach our threshold for using our limited resources.

If we believe that improvements in the well-being in access in general of the beneficiary population can result from enhancing the cadre of people dedicated solely to their care and to research and to their problems, et cetera, and if estimates from other national organizations suggest that we have one-fifth as many of such people as we need to serve the rapidly growing population when the baby boomers go to Golden Pond, et cetera, et

cetera. The number of geriatricians in the country is actually falling and we've got this looming demographic wave.

Then is it reasonable to collect data with respect to the relative compensation of this group to see whether that's one of the factors that might be impeding development of the cadre. That's where I was going.

MR. SMITH: I think the answer in that case, Jack, is yes. But the predicate hasn't been established. We don't have, so far is we know, and we will continue to look at the data to see if one is emerging, we don't have an access problem. We don't have an entry and exit problem.

DR. ROWE: I would accept that. I'm thinking about 2010. We can't turn around and start producing them then, at that point. That's my point.

MR. SMITH: And we might well conclude that the country faces, and young baby boomers face, a potential access problem in 2010 or 2015 or whenever, and that we ought to do something about that access problem. And compensation might well be part of it.

But compensation for next year's providers is not a useful part either of solving the 2010 problem or of understanding our access issues in the year for which we're trying to make a physician update.

MR. HACKBARTH: We're going to need to move on here because we do need to hear about the RAND report. I think Mark and Kevin have heard what we have to say on this.

Anything else, Kevin, before we move on to the Rand study?

DR. HAYES: No.

Moving on to the next topic of the AHRQ report, this report concerns increases in Medicare expenditures for physician services.

And just by way of background, let me say a few things about the purpose of the study, why it was conducted and so on. The Secretary of Health and Human Services, working through the Agency for Health Care Research and Quality, was required to conduct this study under the Balanced Budget Refinement Act of 1999. That act, among other things, addressed some technical issues that had emerged after the first few years of implementation of the Balanced Budget Act of 1997.

And one area that the BBRA focused on was the payment update formula for physician services, what's known as the sustainable growth rate system.

One of the issues that had emerged with respect to the SGR had to do with the sustainable growth rate itself and whether it adequately accounted for advances in technology, improvements in medical capabilities, hat kind of thing. And so the Congress asked the Secretary to conduct this study and specified various factors to be addressed and they are listed on the slide here, the medical capabilities, technology, demography, and the geographic location where services are provided. And the

Secretary was also given the opportunity to make any recommendations as appropriate.

And then the final provision in the law was that MedPAC was to review the study and provide the Congress with comments.

We had six months to do this. The Secretary's report was released April 15th, so the due date now for our comments is October 15th.

In the process of completing the study, AHRQ contracted with the RAND Evidence-based Practice Center for completion of work on the study. As I say, the report itself was released April 15th.

To help us understand more about what the Secretary's report says, we have with us today Melinda Beeuwkes Buntin from RAND. She's a health economist there and was the lead author on the report.

We'll ask her to go through their findings and then I will come back and give you a rough sketch of where we think the comments to the Congress might go.

DR. BUNTIN: I want to thank you for inviting me to speak about this study, and in particular thank Kevin Hayes and Joseph Newhouse, both of whom have actually given us comments on the study at at least two earlier stages of review. So thank you.

I'll give you a quick look at where I'm going. I'll first talk about our objectives, then outline our methodology, describe our findings for you, particularly our findings about the trends in the use of physician services by Medicare beneficiaries, describe those trends by health condition, and talk about the role of observable factors in explaining why there's been an increase in the use of physician services by Medicare beneficiaries. And finally, I'll tell you what I think our conclusions and the policy implications of those conclusions are.

To go quickly over the objectives, the objectives were, in short, to meet the Congressional mandate, as Kevin outlined it. But I should say that the objective of the study was not to evaluate the SGR or to figure out a way to fix the SGR. It was simply to look at the determinants of increases in expenditures for physician services.

In order to do that, we had to address a challenge that many people do in trying to figure out why health spending is rising. We needed to, in effect, decompose these changes in expenditures into different causes. The first step in doing that is to separate price changes from changes in quantity.

Luckily, in the case of physician services there is a very simple unit that captures the physician time, effort, knowledge, resources. In short, is an excellent measure of quantity of services delivered. And that's the relative value unit that forms the basis of the resource based relative value scale. This is, of course, the payment method used by Medicare

for reimbursement for physician services. Prices are set by CMS when they establish the conversion factors.

So we were able to relatively easily decompose the change in expenditures for physician services into changes due to prices and changes in quantity.

I'm going to focus in his presentation on changes in quantity, so changes in numbers of RVUs delivered to Medicare beneficiaries.

When we were looking at those changes in RVUs we wanted to be decompose it into changes due to observable patient characteristics. But then, as in most studies of increases in medical expenditures, we were left with a large unexplained amount of residual change, so change that we couldn't attribute to discrete factors.

Many people would attribute this to technological change. In fact, I'm sure you'll hear more about that from the panelists who will follow me this morning.

So we had two methods of getting at what was going on in that residual that I'll tell you about as I go through our methodology. As I was explaining, the first thing that we did was examine changes in the RVUs delivered to a nationally representative sample of beneficiaries and we looked at the time period between 1993 and 1998.

We took the RVUs from the later time period, specifically from 1998, and we deflated them back to the 1993 baseline values. We did this for two reasons. One was to create comparable units across time so we could fix, let's say reimbursement in practice patterns in 1993 and then look at if those practice patterns had held what would we expect to see in 1998 in terms of service use.

But we could also then decompose the increases in the use of physician services into those that were due to the use of new services versus an expansion in the use of services that were existing in 1993.

So we did that. We looked at RVU use per beneficiary per year. We attributed changes, as I said earlier, to measurable factors. And then we compared the predicted use we expected to see to the deflated use we would have seen if practice hadn't changed between '93 and '98. And then we looked at what actually happened in 1998.

After we had done that, we did find population groups where there was a larger or smaller than average increase or decrease in the use of physician services. So groups where this residual was large. And we gathered expert clinical opinion to try and explain why these residual changes were larger.

In addition, we also looked at the extent to which site of service changes and increases in managed care enrollment might have contributed to increases in RVU use among the fee-for-service population.

Now I'll show you what are findings look like. We

found that overall per capita RVU use increased by about 30 percent between 1993 and 1998. On this slide, the lower red line is what we predicted in terms of RVU use based on the observable characteristics of the population over time. This line actually slopes down slightly.

So while the average beneficiary in 1993 used about 38 RVUs, if we took all of their population characteristics and used those to project what would happen in 1998, we actually project that beneficiaries would use on average one fewer units of physician services. I'll tell you more about that later.

The yellow line is the deflated RVUs. So that represents the RVUs in terms of the 1993 fee schedule. The green line is the actual number of RVUs used.

If you break down these changes, you'll see that by 1998 there was a total 13 RVUs used -- a greater number of RVUs used in 1998 than we would have projected based on patterns in 1993. RVU use went up to actually about 50 RVUs per patient.

1993. RVU use went up to actually about 50 RVUs per patient.
You can break this down into the majority of that use which was due to an increase in the use of existing services. So the difference between the red line and the yellow line of 7.5 RVUs was an increase in the use of services that were available and reimbursed for in 1993. And there were 5.5 RVUs increase on average due to services that were newly covered or newly added to the fee schedule, or services for which the number of RVUs was increased.

Since you might find it strange that we actually projected a slight decrease in the use of physician services, I thought I'd tell you why we saw that in brief. First, was that part of this is due to the changing age and gender composition of the Medicare population. Specifically, the number of disabled beneficiaries and the number of beneficiaries over the age of 85 increased. Those are two groups who actually have lower than average use of physician services. There was some change in the place of residence of beneficiaries. In particular, more than them lived outside of urban areas and moved to the West.

Finally, there was a change in the health status of beneficiaries. In particular, they were reporting fewer limitations in the activities of daily living and instrumental activities of daily living. And fewer of them reported a history of heart attacks. This is consistent with recent literature about advances in cardiac care and also in declines in disability among the elderly.

So then we broke down these changes in the use of physician services by beneficiaries' conditions. This slide shows you, in the middle, the mean increase which remember was 13 RVUs per person.

There were some groups that had higher than average increases in the use of physician services and those are on the top of the slide. Those include decedents, patients with osteoporosis, patients with strokes or brain hemorrhages, and

patients with heart conditions other than angina, CHD, or hypertension.

There were also some groups that had lower than average increases in the use of physician services, and that included patients who had broken their hips, or who didn't report any conditions, any health conditions.

We were able to break this down into the portion of these increases or decreases that was due to the use of services existing in 1993 versus those that were new. We're going to call them new services.

The yellow bars are the same as on the previous slide. The orange bars represent the increase or decrease in the use of services existing in 1993. And the blue bars represent the increase in the use of services that were newly added to the fee schedule between '93 and '98.

You can see that, just as in the overall numbers, most of these increases in services are disproportionately due to an increase in the use of services existing in 1993.

We also broke this down by inpatient versus outpatient use. I won't go over this in detail, but you can see that there are a few categories where patients had greater or actually lesser growth in RVUs. Those included the heart condition patients again, colon cancer patients, Alzheimer's patients, and patients without any self-reported conditions. Interesting, the colon cancer patients and the Alzheimer's patients used fewer of the services that were existing in 1993 in outpatient settings in 1998. But they use services that were added to the fee schedule between '93 and '98.

DR. ROWE: What kind of services would those be?
DR. BUNTIN: The services that were existing or the services that were added?

DR. ROWE: [off microphone] It's counterintuitive. You would think that people were getting more colonoscopies so I'm not sure what other services you can be talking about. Have they had a diagnosis for colon cancer?

DR. BUNTIN: Yes, that's correct. These are people who say that in the past a doctor has told them that they have colon cancer. They may or may not have active colon cancer at the time we're looking at them.

The types of services that they might have, and this brings up an excellent point that I was going to get to later but I'll talk about now, which is that it's difficult to really pull apart what's going on within the new category and what's going on within the existing category. I'm labeling something existing if it was available in 1993.

However, an increase in the use of existing services could, in a sense, represent an expansion of medical knowledge or technological change and that we could be, for example, doing bypass surgery on someone who's older or sicker than we used to do it on. And that probably accounts for part of that increase

in the use of existing services.

Now what's going on here is that colon cancer patients actually use fewer services. It may be, as was suggested, a substitution. So there may be a new service that they can get and that's why they're getting more new services that's replacing an old service.

There may be advances in technology that require fewer follow-up visits after a procedure. There's a whole range of things. I can't specifically tell you what is going on within the colon cancer or Alzheimer's disease patient categories in the outpatient settings because those aren't conditions that we took to our clinical experts. But I can tell you what's going on with lung cancer patients who saw a decrease on the inpatient side in their use of physician services. I'll get to that in just a moment.

DR. ROWE: Thank you.

MS. DePARLE: Melinda, when you say existing, do you mean it was available at Brigham and Women's or that it was thought widely available and that Medicare covered it in all jurisdictions? Or did you go to the intermediary level to see how it was covered?

DR. BUNTIN: That's a good question. These were things that were reimbursed on the standard physician fee schedule in 1993, so there are some services that moved from special carrier codes onto the fee schedules and we're counting those in our category of new here. So they may have existed somewhere but if they weren't widely reimbursed, we're counting them as new.

So the picture looks again somewhat similar on the inpatient side, although the mean increase in RVU use on the inpatient side was very small compared to the outpatient side. Decedents, osteoporosis patients, and strike and brain hemorrhage patients were again the categories that saw greater than average increases while lung cancer patients saw a significantly below average increase in the use of physician services. They actually saw a decrease in their use of physician services on the inpatient side.

Again, the decrease was due to a decrease in the use of the services existing in 1993.

By picking out these categories on these charts to show you who was greater or lesser than, I somewhat obscured one of our central findings which was that, in general, most patient categories did not see differences in the use of physician services that were differences from the average. So in fact, it was surprisingly uniform across conditions, the growth and the use of physician services.

So as I said, we picked out groups where the residuals were large or particularly small and we took those to our clinical experts. The conditions that we chose were osteoporosis, lung cancer, and stroke. When we took these to our physician panels, they actually came up with a very wide variety

of factors that could explain these increases or decreases in the use of physician services. I'll give you a few examples of them.

For stroke, one of the things that the physician experts put forward was improvements in the imaging of carotid arteries. They felt that this was part of a general increase, a recognition of the importance of preventing stroke recurrence, and that would explain the increase in the use of physician services by stroke patients.

For osteoporosis, there were new bone scans and also new pharmaceutical therapies that could explain their greater than average increase. For lung cancer, the physicians pointed to shifts in chemotherapy from inpatient to outpatient settings.

However in general, the factors that these physicians pointed to were not specific enough for us to break down those changes we saw and ascribe them to discrete causes. However, most of the sources of change that they pointed to are things that could be construed as constituting technological change.

There were couple of other factors that we examined that could affect the use of physician services. One was shifts in sites of service. As you may know, some services are assigned fewer relative value units if they're performed outside of a physician's office. The reason is that they have to bear all of the practice expense of providing that service. We estimated, however, that the effect of this on the use of physician services or the change in the use of physician services was negligible.

There might also be an effect if unobservably healthier beneficiaries joined HMOs than the average RVU use in the feefor-service population might rise. We estimated this effect. We found that a really upper bound estimate on the magnitude of this effect was a 6 percent increase. So it certainly wouldn't explain the majority of the increase that we saw.

To tell you about some of our challenges and limitations, one is that there may be factors that we can't observe that are driving variation or change in RVU use across beneficiaries. And there may be technological changes that are not captured by RVU updates or refinements. These are the things I alluded to before. If we're doing the same services but we're doing them for sicker or older populations than we used to. So we concluded that the increases that we're calling increases in the use of new codes are actually a lower bound on the extent of technological change.

We also found that there were other factors such as prescription drugs which are not reimbursed by Medicare, in the case of outpatient prescription drugs, that can affect physician productivity or could affect use of physician services.

And finally, of course, we can't judge whether these increases in service use are appropriate.

So our conclusions were that case-mix actually explains very little of the 30 percent increase we saw in the some use of physician services. We found that increases in the use of

physician services were surprisingly uniform across medical conditions. They took place across a wide variety of conditions, demographic groups, and types of services. The majority of the increase, however, was due to a greater use of services existing in 1993 as opposed to the increase in the use of new services. But some of these increases in use can't be ascribed to discrete causes.

The implications of this are that there's no really easy fix that we could find for the SGR. There was no evidence to recommend incorporating specific factors into the SGR to account for case-mix or location of service.

We also found that technological change was extremely diffuse and multifaceted, and would be very difficult to capture in a formula. We were concerned that there was a potential for access problems if demand for services continued to outpace the SGR limits. But most importantly, we concluded that it's really critical to understand the benefits of increased use of physician services in order for us to evaluate these changes we've seen.

MS. DePARLE: I had a couple of questions just drilling down into this. On your slide 14 you made the comment about your observation that managed care enrollment could affect your results here if healthier beneficiaries join HMOs than average RVU use in fee-for-service population rises. Can you?

DR. BUNTIN: Tell you how I did that?

MS. DePARLE: Yes.

DR. BUNTIN: In our modeling we accounted for all of the observable characteristics of beneficiaries. So we accounted for their age and their gender, whether they were disabled, their health conditions, things like that. So we were really accounting for a lot of things that might affect selection into HMOs. But we were concerned that there were unobservable factors that might also -- unobservable selection into HMOs.

So what we did was we looked at patterns of spending for people in the period before they entered an HMO. So we took people who, on all the observable factors, looked the same. But one person had joined an HMO and the other person hadn't. And we took the differences between their costs and estimated that to be the selection difference. Should I back up and try that again?

MS. DePARLE: The one you looked at was fee-for-service Medicare; right?

DR. BUNTIN: That's correct. So we had fee-for-service Medicare. However, some of those beneficiaries joined HMOs.

MS. DePARLE: During the time period you studied?

MS. DePARLE: Yes. So for example, we had a beneficiary who might have joined an HMO midway through 1998. We said look at that beneficiary who joined an HMO. Let's match them, in essence, to a beneficiary who didn't join an HMO who, on all their other characteristics, looks like that one. What's their difference in costs?

And that's the difference that's due to those

unobservable factors that might make them healthier and more likely to join an HMO.

MS. DePARLE: What kind of difference in costs did you find? What, on average, was it?

DR. BUNTIN: We found a very large difference in costs. I believe it was on the order of 40 percent. So if you take these beneficiaries who have the same age, same gender, same reported health conditions and activity limitations, one joins and HMO and one doesn't, there's a 40 percent difference in costs.

And that's how we estimated the potential magnitude of that effect.

MS. BURKE: [off microphone] Is the difference that the fee-for-service use 40 percent more?

DR. BUNTIN: More.

MS. DePARLE: The other one, on page 15 I guess it is, you mentioned technological changes not captured by RVU updates. And you talked about factors such as prescription drugs that could affect physician productivity.

DR. BUNTIN: Yes.

MS. DePARLE: Can you tell us more what you mean by that?

DR. BUNTIN: Yes. The resource base relative value scale was developed to capture what's going on in a physician office and the work that's involved with delivering a typical service. It may not perfectly, however, reflective the fact that beneficiaries going in for a standard let's say intermediate office visit are now getting more prescriptions than they did in the past. Over time, with the five-year updates and things like that, we would expect the fee schedule to account for those things but it can't perfectly account for those things over time. And that's I was getting at.

DR. REISCHAUER: I think this is a fascinating study and provides a lot of insights, but I have a couple of questions and then some observations on you could cut it and look at this same problem a slightly different way.

One question is whether you made any sort of rough attempt to look at what was happening to RVU consumption by the non-elderly population versus the Medicare population.

The second one is whether you think there's any substitutability between the new and the old? In a sense, if there was no new technology, we might have gotten a whole lot more of the old technology being consumed.

This gets me to my sort of major observation, which is there's lots of explanations for what's going on here that you that you didn't discuss and they might be in the longer paper. One is that this period was a period of very rapid income growth, particularly among the aged, and one would expect consumption of health to rise as incomes rise.

And secondly, one would want to look at the price to

the individual of the product and if supplemental insurance was becoming more generous, cost-sharing was being reduced, one would expect abnormal increase beyond demography and other things in the consumption of the product. And it could be that barriers or access improved significantly over this period.

This is a period when providers are being ravaged by managed care companies and the relative attractiveness of Medicare improves because it's the last open range, so to speak, just to make Mary comfortable here, where doctors are free to practice without excessive intervention by bureaucrats. That was in quotes.

DR. ROWE: I know you disagree with what I said earlier but don't get carried away over there.

DR. REISCHAUER: So there are other ways of looking at this. I was wondering if you tried to go into this?

DR. BUNTIN: I'll take it from the top, which is did we look at the use of RVUs by non-elderly?

No. We would very much have liked to, however we didn't have access to the data or resources to do so. It would have been very interesting.

We did compare some overall expenditure trends, and the trends were very similar. That's why in the detailed report you'll see that we have some conclusions saying that whatever is driving the use of physician services among Medicare beneficiaries, it looks like similar things could be driving the use of physician services by non-elderly, given the total dollar spent. But we couldn't break it down into RVUs.

On your second question about substitution, and I think actually what you were getting at there was are these old and new services substitutes? Are they sometimes complements?

I think both things could certainly be going on. You could easily imagine that a new imaging service could replace an old one, but it could also be that there are new imaging services that require the use of more office visits to follow up. So it's certainly possible that there are both substitutes and complements.

DR. REISCHAUER: What I'm getting at is when we do disaggregations like this and we all go out and say oh, it's technology, technology is really driving this forward. If somehow I could freeze dry technology and just leave us constant, we might see 85 or 90 percent of what's going go on anyway, in terms of -- for the reasons that I then talked about, rising incomes, access, that kind of thing.

DR. BUNTIN: Yes. So in terms of what other factors might explain this, I think right actually rising incomes is one of my pet theories about why this is going on. I don't know a way to break this down and look at the effect of income change, but as I said it's one of my pet theories.

The price to the individual can also certainly change. If people are overall getting more services then not only due to

changes in supplemental insurance but due to the fact that more people have already paid their deductible, we might see increases. There may also be feedbacks with the price changes that are changing volumes. So all these things could be going on.

I think that there is possibly more that could be done by drilling down lower than I was able to do within the constraints that I had in doing this study. More look at specific conditions to try to figure out what's going on and maybe get at some of those factors.

MR. MULLER: How did the RVU increase break out by in and outpatient utilization? Because managed care, in a sense, had less constraint on outpatient utilization at that time. So how did it break out between in and out?

DR. BUNTIN: On the inpatient side there was a very small increase. I believe it was two RVUs per person out of the total of 13 on average.

MR. MULLER: Also, the technology improvement, for example, CTs in '93 to '98 there was advances, and scopes and so forth. So a CT in 1998 was different than a CT in 1993, though in your categorization it would be an existing service; correct?

DR. BUNTIN: That's correct, although the extent to which the number of RVUs that were associated with reading a CT scan was changed, because of the advancements in CT scanning, I would be counting that as part of the new service.

MR. MULLER: Because I think based on some of the information we looked at last year, when we looked at the growth of the various outpatient facilities, especially in imaging and ambulatory surgery, the kind of increasing sophistication of doctors offices, all of that, it's not hard to see the major explosion being on the outpatient side because the technology, by being more available on the outpatient side than it was in the prior period, made it possible to provide many more services to this population than before.

So it doesn't surprise me at all, the predominance of this. You said two of the 13 was inpatient, you said?

DR. BUNTIN: Right.

MR. MULLER: That's pretty consistent with the evidence we had last year.

MS. BURKE: Can I just follow up with a question, so that I'm certain that I understand how the data reads?

As Ralph suggested, there has been a change in the nature of services but also a clear movement out of inpatient settings to outpatient settings. To the extent, for example, that one sees an absolute move or there are things we can now do on an outpatient basis that we did on an inpatient basis, but they are not dissimilar, does that track as a new or an old?

And when you see a dramatic increase in the outpatient and a small increase on the inpatient, to what extent is the outpatient RVU use increase a reflection of those things have

absolutely moved out of the inpatient setting?

DR. BUNTIN: I understand your question, but I can't tell you the answer. I'm certain that some portion of that is due to things migrating from inpatient to outpatient, but I didn't break it down in terms of what things are -- were more predominantly performed on the inpatient setting in '93 and what percentage of them moved to the outpatient.

MS. BURKE: So the net effect is that we might see some of the increase in what is identified as new on the RVU side as the literal migration rather than actual move, or not?

MR. MULLER: A cardiac cath would still be existing in your classification, even if it's now done on an outpatient basis.

DR. BUNTIN: That's correct.

MS. BURKE: So it would be old, not new?

DR. BUNTIN: Yes, it would be old, not new. If the service was existing, regardless of where it was provided in '93.

MS. BURKE: So location wouldn't have had an impact on

the definition of what is new?

DR. BUNTIN: Right, but it's yet another way in which the service itself, the technology may have changed to make it safe enough to perform in an outpatient setting.

DR. NEWHOUSE: That's why she's saying the new is a lower bound.

MS. BURKE: Thank you.

MR. FEEZOR: Bob, I guess I was a little troubled by your assertion that maybe greater coverage might have been helpful, because I think in the mid to late '90s, and maybe Alice could bear me out, I don't think first off, the 10 categories of Medicare supplemental products didn't change in terms of any enhancement. The only thing that might have happened, in terms of product I think, would have been maybe some of those Med sup products may have gone to using PPO networks, but that probably wouldn't have changed the benefit structure. It probably would have simply been reflected in flatter price increases for a period of time.

MS. BURKE: Might you not have seen some change in financing? That is the availability of people to essentially purchase? You might not have seen a change in the product, but you might see an increase in the number of people because of their incomes.

MR. FEEZOR: I think income growth, which was the first assertion that I heard from Bob, I would totally agree.

 $\,$ MS. BURKE: But that could potentially track an increase in --

MR. FEEZOR: Greater access because there's less threshold because I'm richer. I can afford the product. Yes.

Melinda, fascinating study and I thought I was following along pretty well and then you threw me a bit of a curve. You made the difference, the significant difference of 40

percent in the Medicare enrollees that enroll in managed care versus the remaining fee-for-service. And in the summary, I had seen that basically the effects of managed care enrollment to be relatively small, something like less than 6 percent.

Help me understand those two figures.

DR. BUNTIN: Yes. So even though there's a large difference between those beneficiaries who enroll in managed care and those who don't, not very many beneficiaries --

MR. FEEZOR: So it doesn't matter.

DR. BUNTIN: When you look at the impact on the use of physician services as a whole, we said it only accounted for about 6 percent of the increase in expenditures. The reason is because of the small numbers of people migrating into HMOs.

DR. NEWHOUSE: Let me try to work down Bob's 85 to 90 percent is existing. First, on the income effect, the income elasticities in the literature are around .1 to .2, max .4. So a 10 percent increase in income leads to a 2 percent increase in spending. And that would be real income change. So when we're looking at a 30 percent --

DR. REISCHAUER: [off microphone] Those aren't for the ultimate elderly.

DR. NEWHOUSE: Some of it may be. I'm sorry, on the income elasticities.

The issue, you're going to have a much bigger increase in income among the elderly than I think existed to try to account for an appreciable portion of 30 percent change.

Then, on the supplementary insurance side, two points. One is I thought it was actually on balance eroding.

And second, I'm sure post-'98 it's eroding. But the volume increases are continuing to occur, which seems to me to favorite the kind of interpretation Melinda gets to. And also, income growth is presumably slowing in the later period.

What do you mean by adverse selection, Allen?
MR. FEEZOR: [off microphone] Those who are --

DR. NEWHOUSE: That's right, so it might be a smaller change than you would otherwise expect, but the people that are - still on balance there's a fall.

DR. REISCHAUER: But after 1997 it begins to fall.

MR. HACKBARTH: In fact, could you go to the slide actual per capita RVU use 30 percent higher than predicted? It's page six.

DR. NEWHOUSE: We wouldn't be going through these cuts in fees if the volume wasn't increase, right?

MR. HACKBARTH: I just need a bit of explanation on this. I didn't get the deflated RVUs, so if you could just explain that again to me. And then what you make of the change in the trend.

DR. BUNTIN: The change in the trend occurred right about the time of the five-year review, so that's when there's real divergence. That's when there's a wholesale change in the

number of RVUs allocated to services. They took a comprehensive look at the fee schedule and made a large number of adjustments. And that's why they diverge in '96.

Let me go back to explain the deflated. There was a fee schedule that was implemented in 1992, the RBRVS. It assigned a certain number of RVUs to every service on that fee schedule.

Over time that fee schedule was changed based on recommendations of the AMA RUC panel to CMS. So for example, a standard office visit even got an increase in the number of RVUs allocated to it during that five year review because they thought that it took more time and effort to see patients in that later time period.

So what I did was I took the services, I took the codes that were billed for in 1998, and I deflated them back to the number of RVUs that would've been assigned to them had the 1993 fee schedule been in place. So that's the deflated RVUs.

MR. HACKBARTH: Now go back to the first point again about the change in the trend and what you make of that?

DR. BUNTIN: You're looking at the fact that the yellow and the green lines on the slide are tracking together until we hit 1997, when they start to diverge.

MR. HACKBARTH: Just focus on the yellow or the green. Both are increasing steadily and then level off or turn down individually.

DR. BUNTIN: Yes. So the line that's diverging, the yellow line would be an increase in the use of existing services over time. So that yellow line is reflecting the fact that people are getting more and more office visits and bypass surgeries and things that existed in 1993.

MR. HACKBARTH: But it's closer to the predicted RVU use based on the demographic characteristics in 1998 than it was in 1996?

DR. BUNTIN: Yes.

MR. HACKBARTH: As opposed to the preceding years where it was steadily diverging?

DR. BUNTIN: Yes. So why is it trending down there?

MR. HACKBARTH: Yes.

DR. BUNTIN: I think that part of the trending down is due to some substitution for these new services. But why exactly the green line is going down in the last year? I don't know the answer to that. There was some slight decrease in the use of physician services in 1998 as opposed to 1997.

MR. HACKBARTH: Any other questions or comments?

MR. MULLER: Could that have been the BBA effect?

DR. BUNTIN: Not that I can think of.

MR. MULLER: That was the first big hit.

DR. MILLER: This is unit you're looking at.

DR. NEWHOUSE: BBA on Part B was pretty generous in 1998. Those were the growth years.

MS. BURKE: Glenn, can I just ask one more clarifying question? I just wanted to go back to your explanation of why, under the prediction there was in fact a decline. And the discussion, at least it appears on the face of it to me to be counterintuitive. One would have assumed as that age cohort got older that that line would, in fact, even on the prediction, have continued to increase rather than decrease. Why is that counterintuitive to me and no one else?

DR. REISCHAUER: [off microphone] -- younger.

MS. BURKE: But you have a large percentage who are the old old.

> This is a standardized question. DR. REISCHAUER:

DR. BUNTIN: This is the average beneficiary, so let me go over this one more time. Part of that decrease is, in fact, due to the age and gender. You would say yes, there are more of the oldest old.

The interesting thing is those 85-plus people actually use fewer physician services than the younger cohorts, than the younger old. And that's what we're seeing.

MS. BURKE: That seems counterintuitive to me.

MS. RAPHAEL: You also said that disabled people use less physician services, at least I thought I heard that.

DR. BUNTIN: Yes. This is holding other health So a disabled -- what does that mean? conditions constant.

MS. BURKE: I don't understand what that means.

Holding constant other conditions if you're disabled?

DR. BUNTIN: So if you are a patient with a heart condition and you're younger than 85, you're actually going to get more care than if you're older than 85. That's what I mean by holding conditions constant.

MR. HACKBARTH: So they do less to the oldest patients? MS. BURKE: For that condition. But overall, does this also suggest that the old old use fewer services?

DR. BUNTIN: Yes.

MS. BURKE: That seems counterintuitive to me. DR. BUNTIN: It's consistent with the literature on less aggressive care towards the end of life for people who are older. So the same person dying of cancer at age 75 might get more aggressive care than an 80-year-old.

The decrease due to change in health status is consistent with some literature, for example, produced by Ken Mantin about declining disability among the elderly.

MS. BURKE: That's certainly true, that there is a decline. That I agree.

MS. RAPHAEL: So could these predict that as we have a larger percentage in the over-85 population, that we would have a decline in the use of physician services in the future?

DR. BUNTIN: I think that that would be extrapolating beyond the data for a whole host of reasons. And there's actually an interesting article that came out in the New England Journal yesterday which starts to look at some of these subjects.

It's an article by James Lubitz and he looked at persons at age 70, what their remaining life expectancy was and what they're remaining projected expenditures were over that life expectancy. And found that persons who were either sick or healthy at age 70 had approximately the same remaining expected health expenditures. So the people who are sick at age 70 were expected to live a shorter amount of time but spent about the same amount as those who were also expected to live longer.

MR. HACKBARTH: We're going to have to move ahead unfortunately. Kevin, what are our next steps on this, and when do they need to occur?

DR. HAYES: Our next steps on this are to submit a comment letter to the Congress by October 15th. And our rough sketch of that letter would include these points, that we've reviewed the study, that it shows some small effects of some factors on spending for physician services. Measuring other effects is difficult, factors that would include technological change.

In general, we find that the results would complement the work that the Commission has done on growth and variation in use of physician services. It seems that all of this is in the mode of where we are answering some questions but more questions are coming up. And so clearly, we need to do some further work and we plan to do so in our June report.

That's kind of the key points that he would want to make in this letter. And if there are any others that you think we should include, we would be happy to do so.

MR. HACKBARTH: Thank you very much. Thanks, Melinda.